



UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
Washington, D.C. 20230

JUN 7 2004

Mr. Edmond J. Thomas
Chief, Office of Engineering and Technology
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

RE: *Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications*, Second Report and Order, Sixth Report and Order, and Second Further Notice of Proposed Rulemaking, WT Docket No. 00-48, FCC 04-3.

Dear Mr. Thomas:

The National Telecommunications and Information Administration (NTIA), an Executive Branch agency within the Department of Commerce, manages and authorizes the Federal Government's use of the radio frequency spectrum. The Federal Communications Commission (FCC) recently issued a document via the Federal Register seeking comments regarding the Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications. I hereby forward the attached comments that were submitted by the United States Coast Guard to NTIA on the above-referenced document.

NTIA looks forward to working with the FCC on this item and if you have any questions regarding these comments, please contact Gary Patrick, Spectrum Engineering and Analysis Division, of my staff at (202) 482-9132.

Sincerely,

Fredrick R. Wentland
Associate Administrator
Office of Spectrum Management

Enclosure

U.S. Department of
Homeland Security

United States
Coast Guard



Commandant
United States Coast Guard

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Ref: IRAC Doc. 33418/1

2 June 2004
2410

Mr. Fredrick R. Wentland
Associate Administrator, Office of Spectrum Management
National Telecommunications and Information Administration
Herbert C. Hoover Building
14th and Constitution Avenue, N.W.
Washington, DC 20230

Dear Mr. Wentland:

The Coast Guard respectfully submits these Comments in response to the FCC Request for comments published in the Federal Register on April 6, 2004 (69 FR 18007, WT Docket No. 00-48). We request these comments be filed with the FCC by the 7 June comment deadline.

Digital Selective Calling equipment. The FCC noted that the Coast Guard requested that once Recommendation ITU-R M.493-11 and IEC 62238 are adopted, all DSC equipment should meet those standards in place of RTCM Paper 56-95/SC101-STD as appropriate, and asked whether the functional dual receiver requirement of IEC 62238 was prohibitively expensive.

The Coast Guard is pleased to confirm that IEC 62238, ITU-R Rec. M.493-11 and ITU-R Rec. M.541-9 (which was incorporated by reference by M.493-11) have all been adopted. See the enclosure regarding the adoption of the ITU standards. Since IEC 62238's publication over a year ago, the cost of radios compliant to that standard and meeting the standard's functional requirement for dual receivers have dropped significantly, in fact, below the cost of radios meeting the old RTCM SC101 standard just a few years ago. A quick Internet web search shows that IEC 62238-compliant radios are retailing for under \$200. IEC 62238 includes many safety requirements not found in earlier radios, such as an increased precision in distress location, revised alarming designed to prevent sound interference with ongoing safety communications, and GPS interconnection alarms designed to ensure distress alerts have a valid position. The Coast Guard therefore reaffirms its position that all DSC radios should meet the new ITU-R standards, that VHF radios should meet IEC 62238 Class D requirements as minimum, and that reference to RTCM SC101 be removed from the regulations.

FCC regulations do not require that VHF handhelds include a DSC capability, but if they do, they must presently meet ITU-R Rec. M.493 Class D or RTCM SC101 requirements. Once SC101 is phased out, we recommend that the existing ITU-R M.493 minimum requirement be retained for handhelds voluntarily fitted with DSC, but to the "-11" version, due to the higher distress location precision required in M.493-11, as well as for corrections of problems and ambiguity in the older version of the standard. We also recommend that VHF handhelds fitted with DSC include an integral GPS, to ensure that distress calls to the Coast Guard include a location. Distress calls that include an accurate position are vital to the rapid rescue of persons in distress. Connecting a VHF

handheld to an external GPS is not always practical. The cost of including an integral GPS to a VHF handheld has become very low, and the GPS antenna fitting problems inherent in a fixed VHF unit do not exist with a handheld. In fact, DSC-equipped handhelds with an integral GPS are now on the market at competitive prices.

IEC is currently updating its GMDSS DSC standard 61097-3, eliminating several problems that have allowed radios capable of performing ill-advised or illegal DSC operations¹ to be certified. Once the update is complete and adopted, we will ask FCC to update its existing reference to that standard. FCC regulations presently require certifications of HF maritime shipboard radiotelephones to include a minimum DSC capability to RTCM SC101 or ITU-R M.493 Class E standards. With the elimination of RTCM SC101, the newly adopted ITU-R Rec. M.493-11 Class E definition should be sufficient. Adopting this change would not only eliminate an existing problem with the SC101 standard (that standard requires HF radios to be capable of transmitting a routine all-ship call, not allowed by ITU), but also allows eliminates ambiguity problems found in the old version of Rec. M.493.

Since ITU-R Recommendation M.541-9, “Operational Procedures for the Use of Digital Selective-Calling Equipment in the Maritime Mobile Service,” 2004, has now been incorporated by reference in Recommendation M.493-11, M.541-9 should be included wherever M.493 is already incorporated.

Inmarsat Ship Earth Stations. The FCC asked, “Should any mobile satellite equipment meeting the IMO GMDSS requirements and the IEC certification requirements be included? Should any mobile satellite system meeting the Commission’s requirements for enhanced 911 (E911) emergency calling and relevant IEC certification requirements be included?”

The Coast Guard supports inclusion of E-911 capability in all mobile satellite equipment used by mariners. However, until operation and capabilities of E-911 functionality in mobile satellite equipment becomes better defined, and equipment capable of meeting the environmental requirements of ships becomes available, such as that defined by IEC 60945, we propose that mobile satellite equipment used to meet vessel carriage requirements be limited to that meeting the FCC’s GMDSS requirements.

Reserve Power Requirements for Small Passenger Vessels. The FCC asked for comments on whether it should require that all small passenger vessels have VHF radiotelephone communications systems on board that can operate even when the vessel loses power. The Coast Guard supports that requirement as proposed by the National Transportation Safety Board (in its Recommendation M-02-17), but leaves to the Commission the best way to achieve this in their regulations.

Commercial Operator License Issues. The FCC asked whether it should extend the license terms of its GMDSS licenses, and whether it should delete the specification of the number of questions for

¹ For example, certain radios were found to be capable of relaying the coast station’s acknowledgement of a distress call as an all-ships distress relay call, giving the appearance that the coast station itself was in distress. Other models established an all-ships relay of a distress call as the software default option for an operator receiving the alert, including distress alerts that had already been acknowledged, in contradiction of ITU-R Rec. M.541. Other radios transmitted distress calls having position information that was entered weeks or months previously, or allowed the relay of old distress calls, making them appear to be new. Another model ceased transmitting a distress alert after receiving a coast station’s acknowledgment of another ship’s distress call.

each examiner element. The Coast Guard has no objection to these proposals, provided the Commission can ensure that license holders' GMDSS competency is maintained.

Ship Security Alert System. The FCC sought comments to assist them in formulating the rules to guide the industry in making communications equipment to meet the needs of the SSAS. The Coast Guard supports inclusion of the SSAS developed by Cospas-Sarsat and described by RTCM SC110. The Coast Guard requirements for SSAS systems are otherwise included in its Navigation and Vessel Inspection Circular No. 04-03, Enclosure 5, available from <http://www.uscg.mil/hq/g-m/nvic/index.htm>. As SSAS systems using Inmarsat D+ equipment are available, we request the Commission ensure its regulations allow such equipment to be fitted on ships.

Updated References to International Standards. The Commission asked commenters to identify any relevant standards that have been revised or updated to a new version since the adoption of the *GMDSS R&O* on March 27, 2002, thus requiring a corresponding amendment of the Commission's rules. The Coast Guard is enclosing IEC TC80 document 80/Southampton-03-11, *Publications issued by TC80*, indicating recent editions to standards. We request that updates to references of IEC standards specified in the Commission's rules be made from this list. Note especially the 61097-series regarding GMDSS equipment, which should be added to Subpart W of the Commission's rules, in 47 CFR 80.1101. Noting that certain standards listed in the existing rules have and will continue to be long since superseded and often unavailable, we recommend the Commission allow equipment to meet newer versions of these international standards, where appropriate.

2002 Biennial Review. The FCC noted that "housekeeping" changes to Part 80 rules other than those identified may also be warranted. The Equipped to Survive Foundation noted in a report published April 2004, that certain 406 MHz emergency position-indicating radiobeacons with integral GPS (406 GPS EPIRBs) failed to provide GPS location information except under ideal conditions, even in scenarios where there were strong signals from 4 or more GPS satellites available (see <http://www.equipped.com/>). Since EPIRBs are not required to have integral GPS, RTCM and IEC EPIRB test standards do not include tests for GPS reception. We are working with both organizations to update their standards to include such tests, and request the Commission expedite rulemaking to incorporate these update standards once they become available.

Again, thank you for your continued assistance to the Coast Guard.

Sincerely,



J. HERSEY, Jr.
Chief, Spectrum Management Division
By direction

Enclosures

INTERNATIONAL TELECOMMUNICATION UNION



Radiocommunication Bureau

(Direct Fax N°. +41 22 730 57 85)

Administrative Circular
CACE/314

13 May 2004

To Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of the Radiocommunication Study Groups and the Special Committee on Regulatory/Procedural Matters

Subject: Adoption of 2 new and 5 draft revised Recommendations by correspondence and their simultaneous approval in accordance with § 10.3 of Resolution ITU-R 1-4 (Procedure for the simultaneous adoption and approval by correspondence) of Radiocommunication Study Group 8

Mobile, radiodetermination, amateur and related satellite services

By Administrative Circular CAR/165 dated 28 January 2004, and its Addendum of 3 March 2004, 2 draft new and 5 revised Recommendations were submitted for simultaneous adoption and approval by correspondence (PSAA), following the procedure of Resolution ITU-R 1-4 (§ 10.3).

The conditions governing this procedure were met on 3 May 2004, with no administration objecting to their adoption and approval.

These Recommendations are therefore approved and will be published by the ITU as soon as practicable. Annex 1 to this Circular provides the titles of the approved Recommendations, with the assigned number.

Valery Timofeev
Director, Radiocommunication Bureau

Annex: 1

Distribution:

- Administrations of Member States, Radiocommunication Sector Members
- ITU-R Associates participating in the work of Radiocommunication Study Group 8
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and the Special Committee on Regulatory/Procedural Matters
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

ANNEX 1

Titles of the Recommendations approved

Recommendation ITU-R M.1677

Doc. 8/8

International Morse code

Recommendation ITU-R M.1678

Doc. 8/9

Adaptive antennas for mobile systems

Recommendation ITU-R M.1174-2

Doc. 8/13

Technical characteristics of equipment used for on-board vessel communications in the bands between 450 and 470 MHz

Recommendation ITU-R M.541-9

Doc. 8/14

Operational procedures for the use of digital selective-calling equipment in the maritime mobile service

Recommendation ITU-R M.493-11

Doc. 8/16

Digital selective-calling system for use in the maritime mobile service

Recommendation ITU-R M.633-3

Doc. 8/20

Transmission characteristics of a satellite emergency position-indicating radio beacon (satellite EPIRB) system operating through a satellite system in the 406 MHz band

Recommendation ITU-R M.1478-1

Doc. 8/23

Protection criteria for COSPAS-SARSAT search and rescue instruments in the band 406-406.1 MHz



INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC TC80 Plenary meeting 2003

Publications issued by TC 80

NUMBER	TITLE
IEC 60872-1 Ed. 1.0	Automatic radar plotting aids (ARPA)
IEC 60872-2 Ed. 1.0	Automatic tracking aids (ATA)
IEC 60872-3 Ed. 1.0	Electronic plotting aid (EPA)
IEC 60936-1 Ed. 1.1	Radar - Part 1: Shipborne radar (inc amd 1)
IEC 60936-1 amd 1	Annex for out of band and spurious emissions
IEC 60936-2 Ed. 1.0	Radar - Part 2: Shipborne radar for high-speed craft (HSC)
IEC 60936-3 Ed 1.0	Radar - Part 3 Chart radar
IEC/PAS 60936-5	Radar-Guidelines for the display of AIS information
IEC 60945 Ed. 4.0	General requirements
IEC 61023 Ed. 2.0	Marine speed and distance measuring equipment (SDME)
IEC 61075 Ed 1.0	LORAN C receivers for ships
IEC 61097-1 Ed. 1.0	(GMDSS) - Part 1: Radar transponder - Marine search and rescue (SART)
IEC 61097-2 Ed. 2.0	(GMDSS) - Part 2: COSPAS-SARSAT EPIRB
IEC 61097-3 Ed. 1.0	(GMDSS) - Part 3: Digital selective calling (DSC) equipment
IEC 61097-4 Ed. 1.0	(GMDSS) - Part 4: INMARSAT-C ship earth station and EGC
IEC 61097-5 Ed. 1.0	(GMDSS) - Part 5: Inmarsat-E (EPIRB)
IEC 61097-6 Ed. 1.0	(GMDSS) - Part 6: (NAVTEX)
IEC 61097-7 Ed. 1.0	(GMDSS) - Part 7: VHF radiotelephone transmitter and receiver
IEC 61097-8 Ed. 1.0	(GMDSS) - Part 8: watchkeeping receivers for (DSC)
IEC 61097-9 Ed. 1.0	(GMDSS) - Part 9: transmitters and receivers for use in the MF and HF bands
IEC 61097-10 Ed. 1.0	(GMDSS) - Part 10: Inmarsat-B ship earth station equipment
IEC 61097-12 Ed. 1.0	(GMDSS) - Part 12: Survival craft portable two-way VHF radiotelephone apparatus
IEC 61097-13 Ed 1.0	(GMDSS) - Part 13 Inmarsat F77 Ship Earth Station
IEC 61108-1 Ed. 2.0	(GNSS) - Part 1: Global positioning system (GPS) - Receiver equipment
IEC 61108-2 Ed. 1.0	(GNSS) - Part 2: Global navigation satellite system (GLONASS) - Receiver equipment
IEC 61162-1 Ed. 2.0	Digital interfaces - Part 1: Single talker and multiple listeners
IEC/PAS 61162-100	Digital interfaces - extra sentences for AIS
IEC/PAS 61162-101	Digital interfaces - extra sentences other
IEC 61162-2 Ed. 1.0	Digital interfaces - Part 2: Single talker and multiple listeners, high-speed transmission
IEC 61162-400 Ed. 1.0	Digital Interfaces -Part 400: Introduction and general principles
IEC 61162-401 Ed. 1.0	Digital Interfaces - Part 401: Application profile
IEC 61162-410 Ed. 1.0	Digital Interfaces - Part 410: Transport profile requirements and profile
IEC 61162-420 Ed. 1.0	Digital Interfaces -. Part 420: Companion standards and requirements
IEC 61174 Ed. 2.0	Electronic chart display and information system (ECDIS)
IEC 61209 Ed. 1.0	Integrated bridge systems (IBS)
IEC 61993-1 Ed. 1.0	AIS Part 1: Shipborne system using VHF digital selective calling (DSC) techniques
IEC 61993-2 Ed. 1.0	(AIS) Part 2: Class A Universal Automatic Identification system (AIS) -
IEC 61996 Ed. 1.0	Shipborne voyage data recorder (VDR)
IEC 62065 Ed. 1.0	Track control
IEC 62238 Ed. 1.0	VHF radiotelephone with class "D" Digital Selective Calling (DSC) -

cont../

Standards under review

NUMBER	TITLE	STAGE
IEC 61097-3 Ed. 2.0	(GMDSS) - Part 3: Digital selective calling (DSC) equipment	CTTE
IEC 61162-1 Ed 3.0	Digital interfaces - Part 1: Single talker and multiple listeners	CTTE
IEC 61174 Ed. 3.0	Electronic chart display and information system (ECDIS)	CTTE

New Standards Being Prepared

NUMBER	TITLE	STAGE
IEC 61108-4 Ed. 1.0	(GNSS) - Part 4: Differential GPS / Differential (GLONASS)	CDV
IEC/PAS 61162-102	Digital Interfaces - Extra sentences for VDR	SEC
IEC 61162-3. Ed. 1.0	Digital Interfaces - Part 3: serial data instrument network.	CTTE
IEC 61162-402 Ed 1	Digital Interfaces.- Test methods for 400 series	CTTE
IEC 61924 Ed. 1.0	Integrated Navigation System (INS)	CTTE
IEC 62252 Ed. 1.0	Radar plotting aids for small craft and non-SOLAS convention craft	CDV
IEC 62287 Ed 1.0	AIS Class B equipment for non-SOLAS craft	CTTE
IEC 62288 Ed 1.0	Navigational related displays	CTTE
IEC 62388.Ed. 1.0	Radar - SOLAS Radar (replaces 60936-60872 series)	CTTE

10 September 2003